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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,090	03/08/2001	Antonio A. Avides Moreira	P 0278094 9780US	6854

909 7590 03/13/2003

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EXAMINER
PURVIS, SUE A

ART UNIT	PAPER NUMBER
1734	

DATE MAILED: 03/13/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/801,090	AVIDES MOREIRA ET AL.	
	Examiner	Art Unit	
	Sue A. Purvis	1734	

-- The MAILING DATE of this c mmunication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 December 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Objections

1. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Claim 9 is a repeat of claim 6 and is also dependent from claim 6. Since claim 6 limits independent claim 3, claim 9 fails to add anything to the claims it depends from.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewing (DE 35 23 771 A1) in view of the admitted prior art.

Stewing discloses shrink-on sleeves of thermoplastics which are individually injection molded, then stretched. As can be seen in Figure 6, the sleeve (11) is then in a relaxed state as it is ejected from the mold. The sleeve is considered to be at ambient temperature in the relaxed state. Ambient temperature as defined by the applicant is –40 deg C to 60 deg C.

Stewing does not disclose the thermoplastic as being a thermoplastic elastomer.

Applicant admits on page 1 of the specification that thermoplastic elastomers are known to be used in wide applications including shrink-on sleeving.

It would have been obvious to one having ordinary skill in the art at the time the invention was made that the thermoplastic in Stewing is a thermoplastic elastomer, because it is known in the art to use a thermoplastic elastomer when making shrink-on sleeving.

4. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewing in view of the admitted prior art and further in view of Danico (US Patent No. 4,560,083).

Stewing discloses heat shrink sleeves of thermoplastics which are individually injection molded, then stretched. As can be seen in Figure 6, the sleeve (11) is then in a relaxed state as it is ejected from the mold. The sleeve is considered to be at ambient temperature in the relaxed state. Ambient temperature as defined by the applicant is –40 deg C to 60 deg C.

Stewing does not disclose the thermoplastic as being a thermoplastic elastomer.

Applicant admits on page 1 of the specification that thermoplastic elastomers are known to be used in wide applications including shrink-on sleeving.

It would have been obvious to one having ordinary skill in the art at the time the invention was made that the thermoplastic in Stewing is a thermoplastic elastomer, because it is known in the art to use a thermoplastic elastomer when making shrink-on sleeving.

Danico teaches that exposing the elastomeric material to an elevated temperature, allows the material to expand and create an effective seal

It would have been obvious to one having ordinary skill in the art at the time the invention was made to expose the component disclosed in Stewing in view of the admitted prior art to an elevated temperature once it is applied to the object in order to create a seal as shown in

Danico. Furthermore, it is within the purview of the artisan to choose a temperature 20 degrees Celsius below the melting point, because the desire is to loosen the material for a proper seal, not to melt the material entirely.

5. Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewing in view of the admitted prior art and Danico as applied to claim 1 above, and further in view of Schultze et al. (US Patent No. 6,001,464).

Stewing in view of the admitted prior art does not detail the type of thermoplastic used. Danico mentions some examples of elastomers, but does not limit to only those elastomers listed.

Schultze discloses that it is known that thermoplastic copolyetherester elastomers are suitable for seals as they are impermeable to water molecules, such as drops and create materials which are breathable, but waterproof. Schultze also discloses that thermoplastic polyurethanes belong to the class of thermoplastic elastomers. Furthermore that thermoplastic elastomers are generally block copolymers of which the macroscopic property spectrums are a combination of the properties of the individual block -forming components.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a copolyether ester in the process of Stewing to create a component which is water impermeable thus better able to protect the cables or other articles which it is used for sleeving connections.

Regarding claim 13, Schultze also discloses a block copolymer, such as polyurethane, can be used.

6. Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewing in view of the admitted prior art as applied to claim 3 above, and further in view of Schultze et al.

Stewing in view of the admitted prior art does not detail the type of thermoplastic used.

Schultze discloses that it is known that thermoplastic linear copolyetherester elastomers are suitable for seals as they are impermeable to water molecules, such as drops and create materials which are breathable, but waterproof. Schultze also discloses that thermoplastic polyurethanes belong to the class of thermoplastic elastomers. Furthermore that thermoplastic elastomers are generally block copolymers of which the macroscopic property spectrums are a combination of the properties of the individual block -forming components.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a copolyether ester in the process of Stewing to create a component which is water impermeable thus better able to protect the cables or other articles which it is used for sleeving connections.

Regarding claim 14, Schultze also discloses a block copolymer, such as polyurethane, can be used.

7. Claims 5, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewing in view of the admitted prior art as applied to claim 3 above, and further in view of Danico.

Stewing in view of the admitted prior art does not detail how the sleeves are used, only that they are used in connections with cables or wires.

Danico teaches that exposing the elastomeric material to an elevated temperature, allows the material to expand and create an effective seal

It would have been obvious to one having ordinary skill in the art at the time the invention was made to expose the component disclosed in Stewing to an elevated temperature once it is applied to the object in order to create a seal as shown in Danico. Furthermore, it is within the purview of the artisan to choose a temperature 20 degrees Celsius below the melting point, because the desire is to loosen the material for a proper seal, not to melt the material entirely.

8. Claims 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewing in view of the admitted prior art in view of Schultze as applied to claims 3 and 4 above, and further in view of Danico.

Stewing in view of the admitted prior art does not detail how the sleeves are used, only that they are used in connections with cables or wires.

Danico teaches that exposing the elastomeric material to an elevated temperature, allows the material to expand and create an effective seal

It would have been obvious to one having ordinary skill in the art at the time the invention was made to expose the component disclosed in Stewing to an elevated temperature once it is applied to the object in order to create a seal as shown in Danico. Furthermore, it is within the purview of the artisan to choose a temperature 20 degrees Celsius below the melting point, because the desire is to loosen the material for a proper seal, not to melt the material entirely.

Response to Arguments

9. Applicant's arguments with respect to claims have been considered but are moot in view of the new grounds of rejection.

10. Regarding applicant's translation, the examiner obtained a translation of Stewing after the previous Office Action and is relying on that translation for the above rejection. The translation is attached hereto. There is no indication in the translation of Stewing that the material is a "thermoset" material as claimed by the applicant. The material in Stewing is for shrink-on sleeving. Since "thermo-set" material cannot be re-shrunk as would be required by a shrink-on sleeving, this cannot be the case. Furthermore, the material in Stewing is to be used on a telecommunications cable, which implies a more flexible material, because cables are typically flexible.

11. Applicant also argues that there is no disclosure that the material in Stewing "relaxes" at ambient temperature. To "relax" is to make less tense or rigid according to the Merriam-Webster Dictionary. Once the material is out of the stretching mold in Stewing, it is less tense and rigid. Furthermore, applicant's claim fails to give any time frame for the "relaxing" thus it is certainly the case the relaxed material in Stewing is at ambient temperature at some point, such as during storage, which is likely to be room temperature, before it is used on a telecommunications cable.

12. In response to applicant's arguments against Danico, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would

have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

13. In response to applicant's argument with respect to claim 1 that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., ambient temperature) is not recited in the rejected claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

14. In response to applicant's argument that Schultze is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Schultze discloses types of thermoplastic elastomers, there is no reason these elastomers would be limited to what is being done in Schulze.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue A. Purvis whose telephone number is 703-305-0507. The examiner can normally be reached on Monday through Thursday 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rick Crispino can be reached on 703-308-3853. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-1495.

Sue A. Purvis
Examiner
Art Unit 1734

sp
March 7, 2003